MARYLAND
Department of Health

Public Health Preparedness and Situational Awareness Report: #2019:09

Reporting for the week ending 03/02/19 (MMWR Week #09)

March 8, 2019

CURRENT HOMELAND SECURITY THREAT LEVELS
National: **No Active Alerts**
Maryland: **Normal (MEMA status)**

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics): Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health; 2019.

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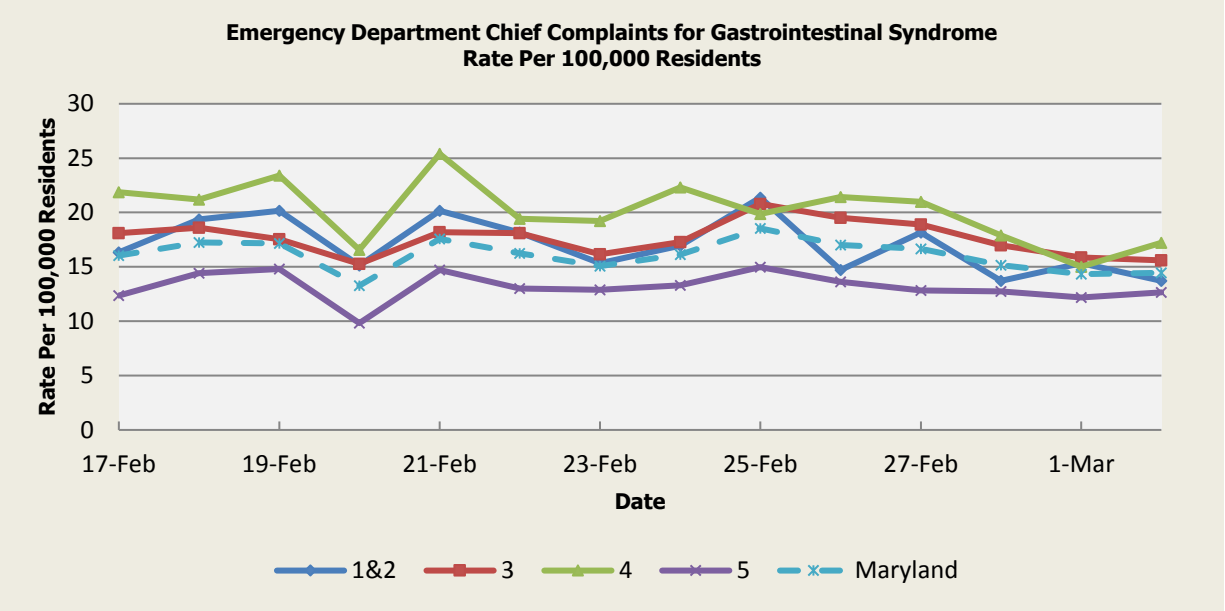
Gastrointestinal Syndrome



There were four (4) Gastrointestinal Syndrome outbreaks reported this week: two (2) outbreaks of Gastroenteritis in Nursing Homes (Region 4); one (1) outbreak of Gastroenteritis/Foodborne associated with a Restaurant (Region 3); one (1) outbreak of Gastroenteritis/Foodborne associated with a School (Region 3).

	Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	13.13	15.06	15.81	10.18	13.09
Median Rate*	13.11	14.83	15.24	10.08	12.95

** Per 100,000 Residents*

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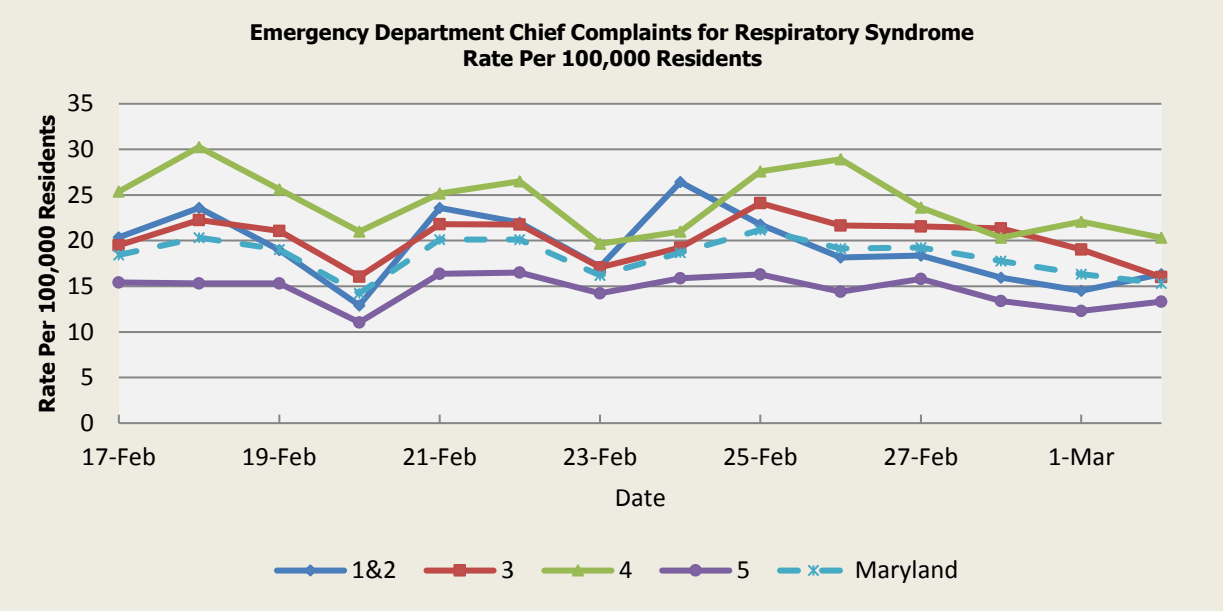
Respiratory Syndrome



There were fifteen (15) Respiratory Syndrome outbreaks reported this week: six (6) outbreaks of Influenza in Nursing Homes (Regions 1&2,3,4,5); one (1) outbreak of Influenza in a Hospital (Region 3); one (1) outbreak of Influenza in an Assisted Living Facility (Region 3); one (1) outbreak of Influenza associated with a Day Program (Region 4); one (1) outbreak of Influenza associated with a Clinic (Regions 1&2); one (1) outbreak of Influenza associated with a School (Region 4); two (2) outbreaks of Influenza associated with Schools (Region 5); one (1) outbreak of ILI in an Assisted Living Facility (Regions 1&2); one (1) outbreak of ILI associated with a School (Region 4).

	Respiratory Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.57	14.67	14.98	9.95	12.71
Median Rate*	12.10	14.10	14.35	9.60	12.21

** Per 100,000 Residents*

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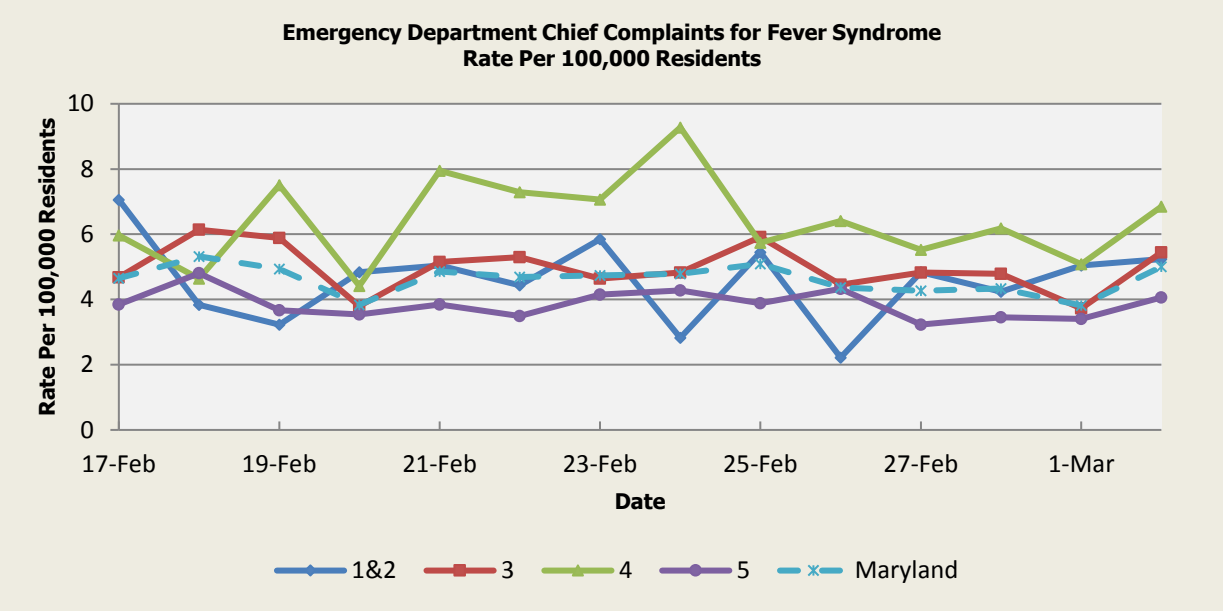
Fever Syndrome



There were no Fever Syndrome outbreaks reported this week.

	Fever Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.05	3.88	4.06	3.03	3.50
Median Rate*	2.92	3.76	3.97	2.92	3.38

**Per 100,000 Residents*

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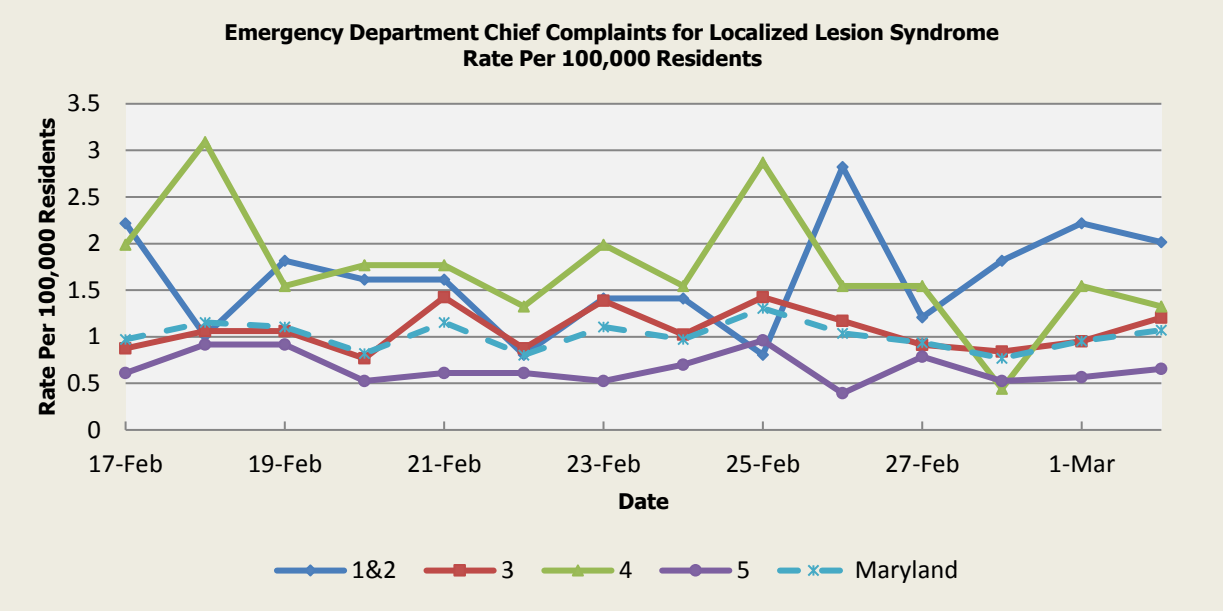
Localized Lesion Syndrome



There were no Localized Lesion Syndrome outbreaks reported this week.

	Localized Lesion Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.09	1.81	2.04	0.92	1.42
Median Rate*	1.01	1.75	1.99	0.87	1.37

** Per 100,000 Residents*

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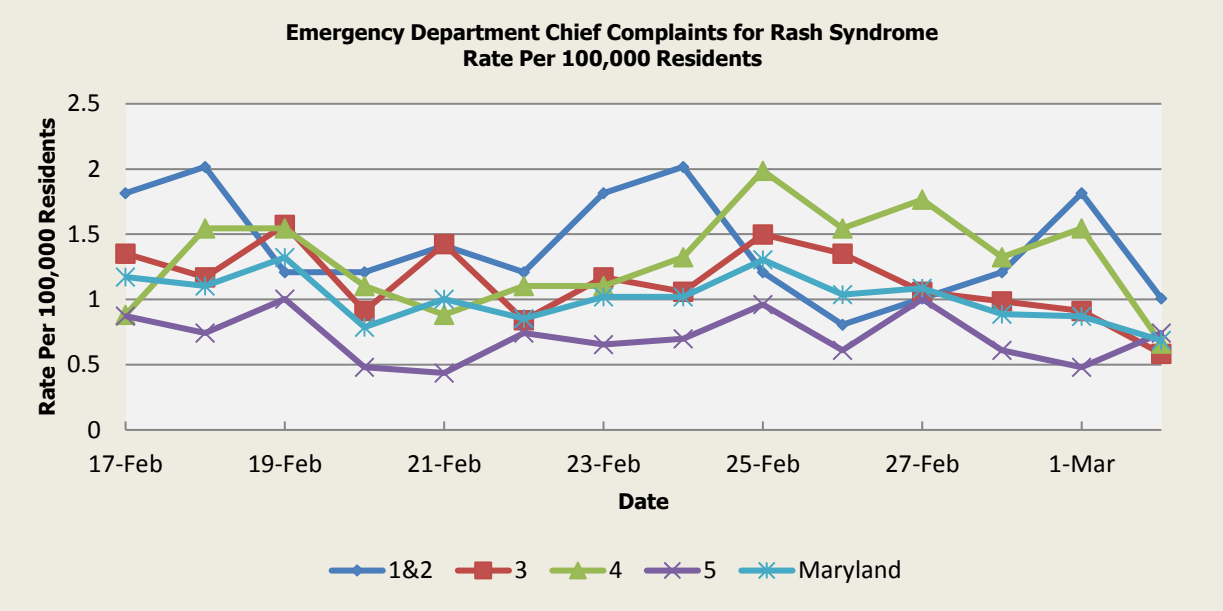
Rash Syndrome



There were no Rash Syndrome outbreaks reported this week.

	Rash Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.22	1.68	1.77	0.99	1.38
Median Rate*	1.21	1.61	1.77	0.96	1.32

** Per 100,000 Residents*

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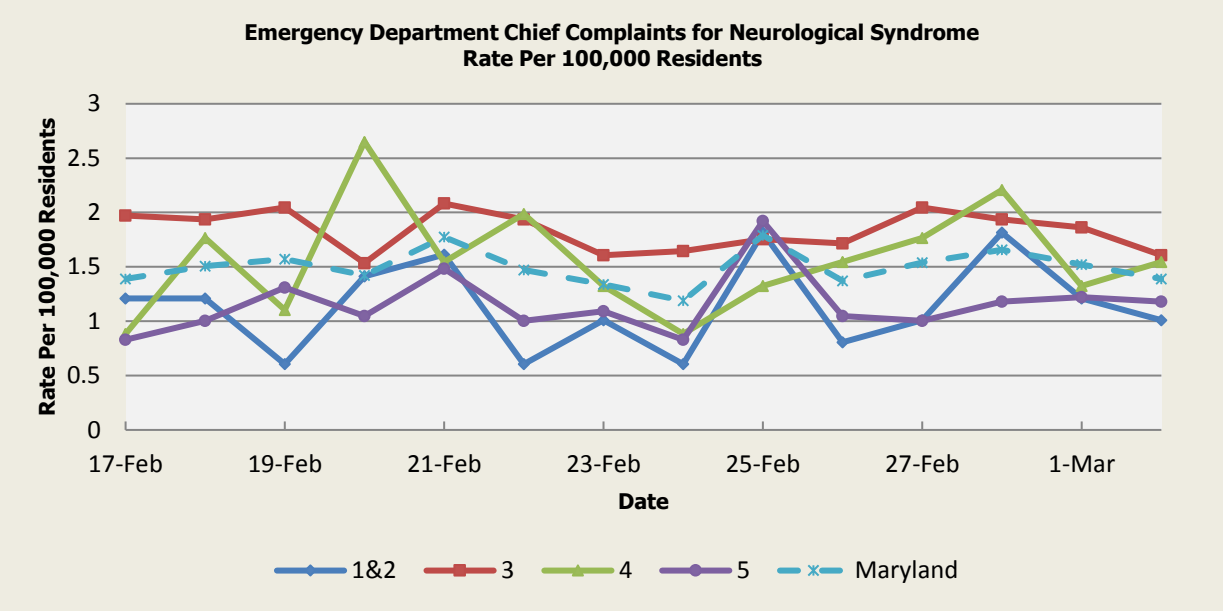
Neurological Syndrome



There were no Neurological Syndrome outbreaks reported this week.

	Neurological Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.75	0.92	0.83	0.58	0.77
Median Rate*	0.60	0.80	0.66	0.52	0.67

** Per 100,000 Residents*

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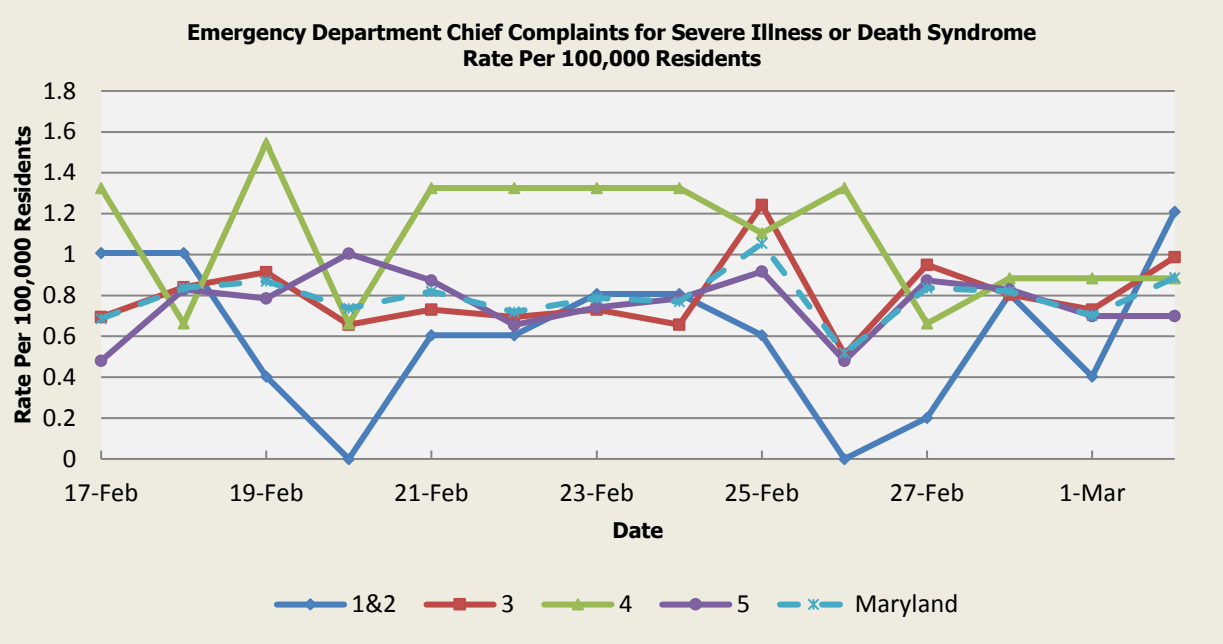
Severe Illness or Death Syndrome



There were no Severe Illness or Death Syndrome outbreaks reported this week.

	Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.66	0.90	0.83	0.50	0.72
Median Rate*	0.60	0.88	0.66	0.48	0.69

** Per 100,000 Residents*

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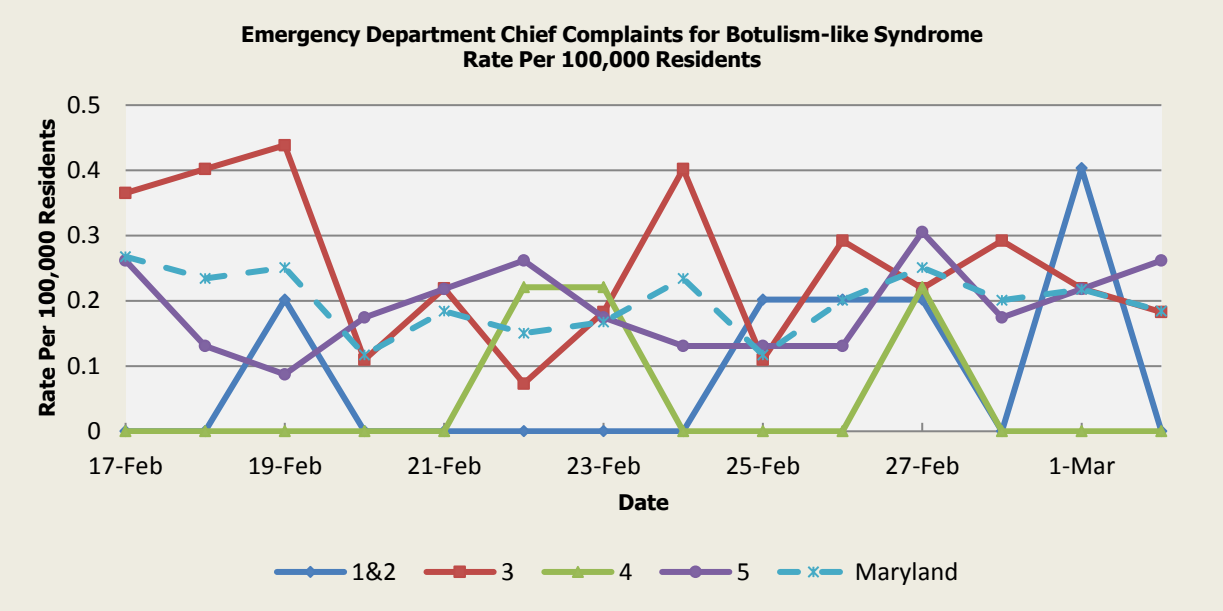
SYNDROMES RELATED TO CATEGORY A AGENTS

Botulism-like Syndrome



There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 2/17 (Regions 3,5), 2/18 (Region 3), 2/19 (Regions 1&2,3), 2/20 (Region 5), 2/21 (Region 5), 2/22 (Regions 4,5), 2/23 (Regions 4,5), 2/24 (Region 3), 2/25 (Regions 1&2), 2/26 (Regions 1&2,3), 2/27 (Regions 1&2,4,5), 2/28 (Regions 3,4), 3/1 (Regions 1&2,5), 3/2 (Region 5). These increases are not known to be associated with any outbreaks.

	Botulism-like Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.07	0.12	0.05	0.07	0.09
Median Rate*	0.00	0.07	0.00	0.04	0.07

** Per 100,000 Residents*

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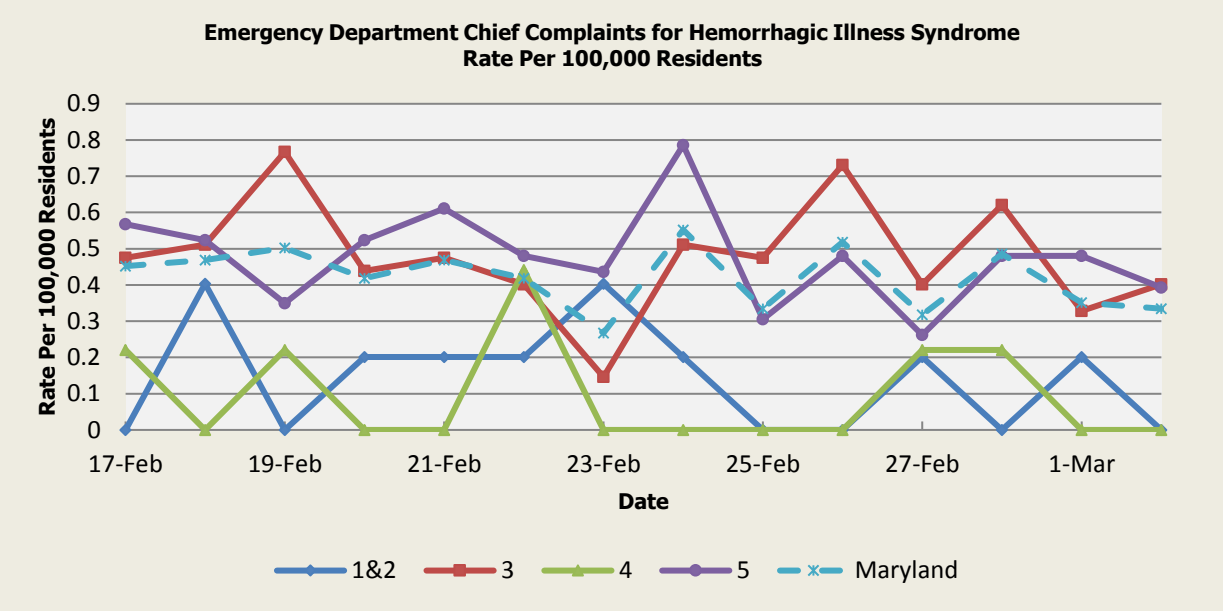
Hemorrhagic Illness Syndrome



There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 2/17 (Regions 3,4,5), 2/18 (Regions 1&2,3,5), 2/19 (Regions 3,4,5), 2/20 (Regions 1&2,3,5), 2/21 (Regions 1&2,3,5), 2/22 (Regions 1&2,3,4,5), 2/23 (Regions 1&2,5), 2/24 (Regions 1&2,3,5), 2/25 (Regions 3,5), 2/26 (Regions 3,5), 2/27 (Regions 1&2,3,4,5), 2/28 (Regions 3,4,5), 3/1 (Regions 1&2,3,5), 3/2 (Regions 3,5). These increases are not known to be associated with any outbreaks.

	Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.04	0.15	0.04	0.12	0.12
Median Rate*	0.00	0.07	0.00	0.04	0.07

** Per 100,000 Residents*

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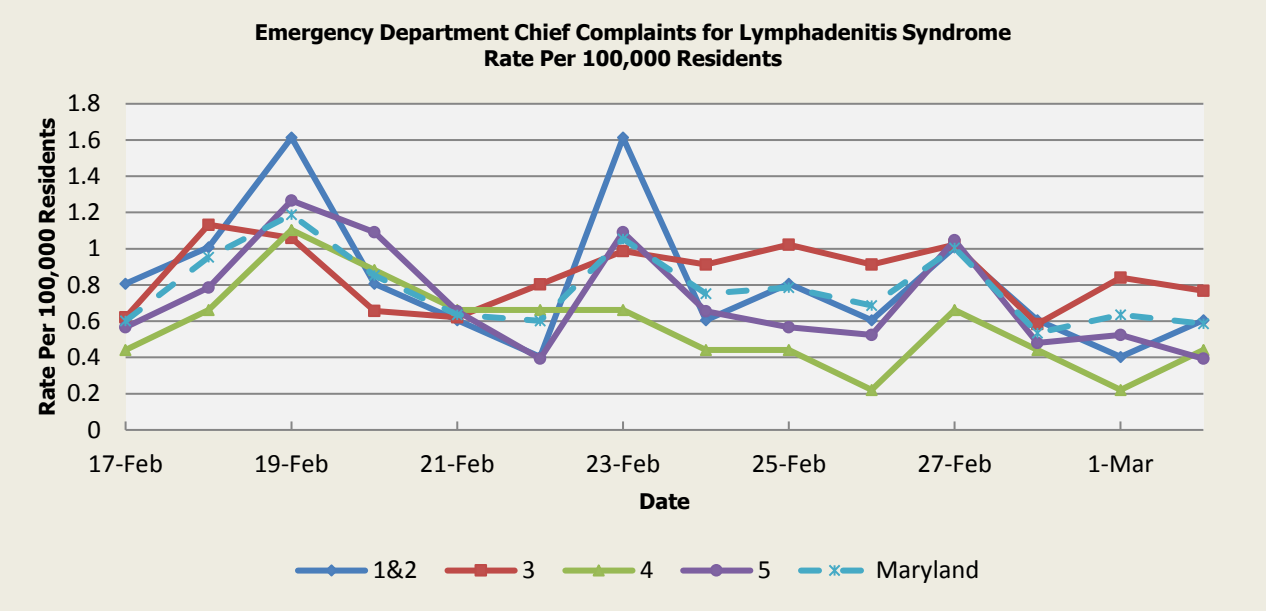
Lymphadenitis Syndrome



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 2/17 (Regions 1&2), 2/18 (Regions 1&2,5), 2/19 (Regions 1&2,4,5), 2/20 (Regions 1&2,4,5), 2/23 (Regions 1&2,5), 2/25 (Regions 1&20, 2/27 (Regions 1&2,5). These increases are not known to be associated with any outbreaks.

	Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.35	0.57	0.39	0.37	0.46
Median Rate*	0.20	0.47	0.44	0.31	0.40

** Per 100,000 Residents*

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MARYLAND REPORTABLE DISEASE SURVEILLANCE

Reportable disease data from the National Electronic Disease Surveillance System (NEDSS) that feeds into ESSENCE is currently being validated. We will include these data in future reports once the validation process is complete.

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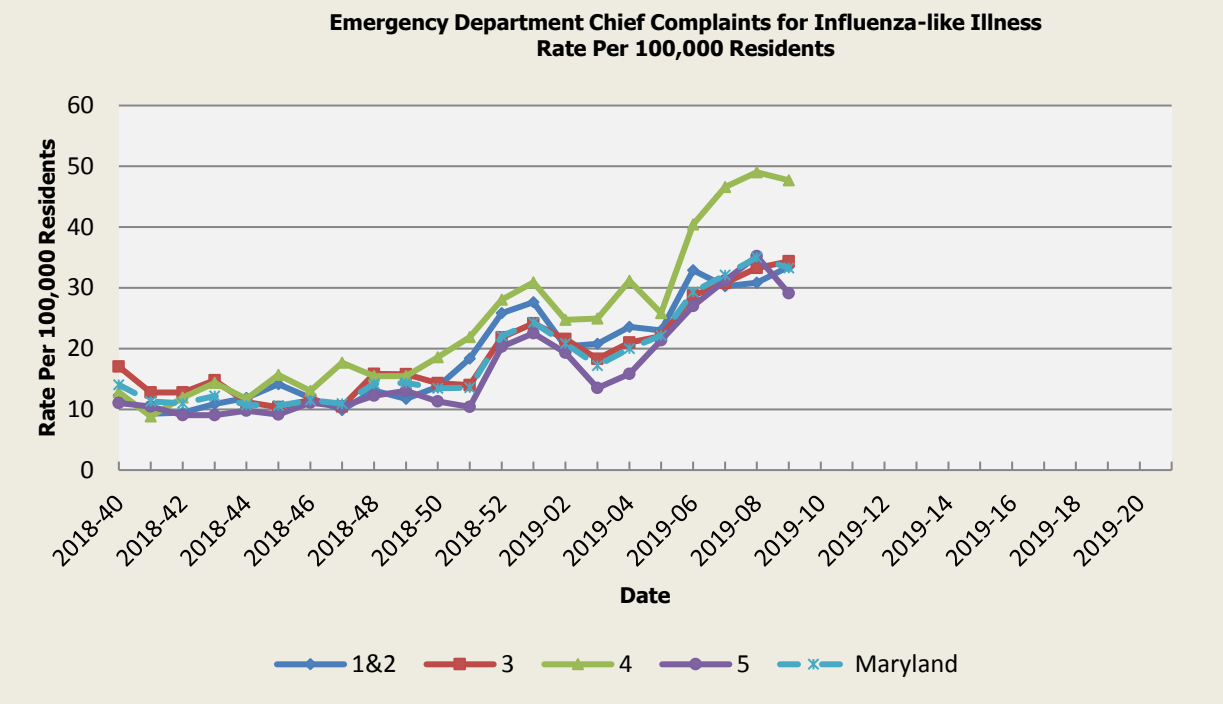
SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October 2018 through May 2019). Seasonal Influenza activity for Week 09 was: Minimal Intensity.

Influenza-like Illness



	Influenza-like Illness Baseline Data Week 1 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	9.96	13.14	12.60	11.16	12.07
Median Rate*	7.66	10.18	9.16	8.62	9.19

** Per 100,000 Residents*

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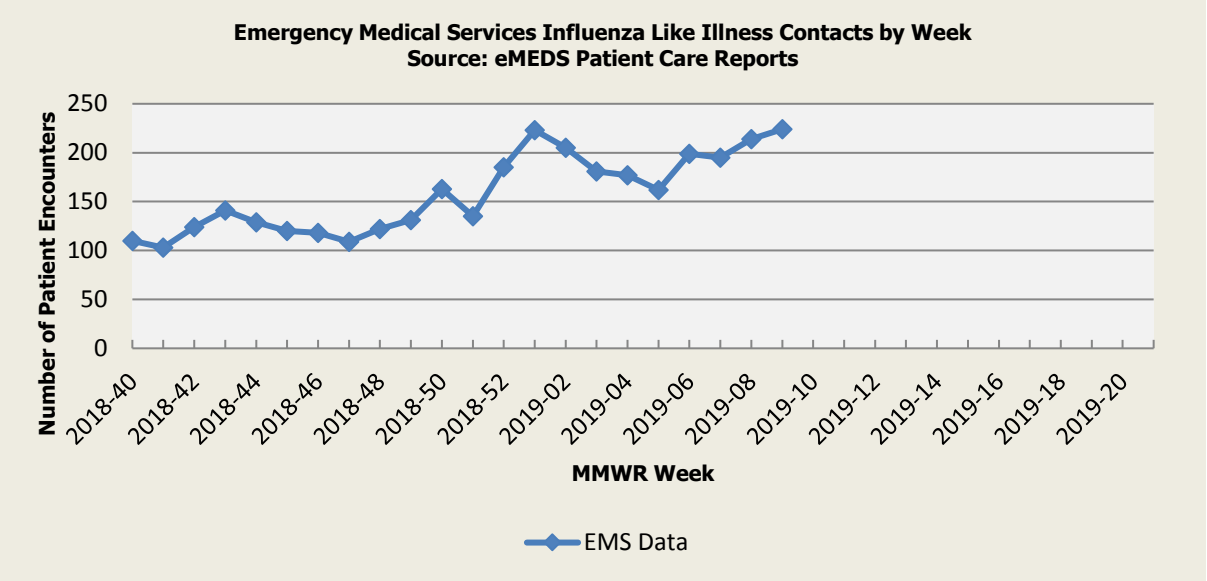
Influenza-like Illness Contacts by Week



Disclaimer on eMEDS flu related data: These data are based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. These data are reported for trending purposes only.

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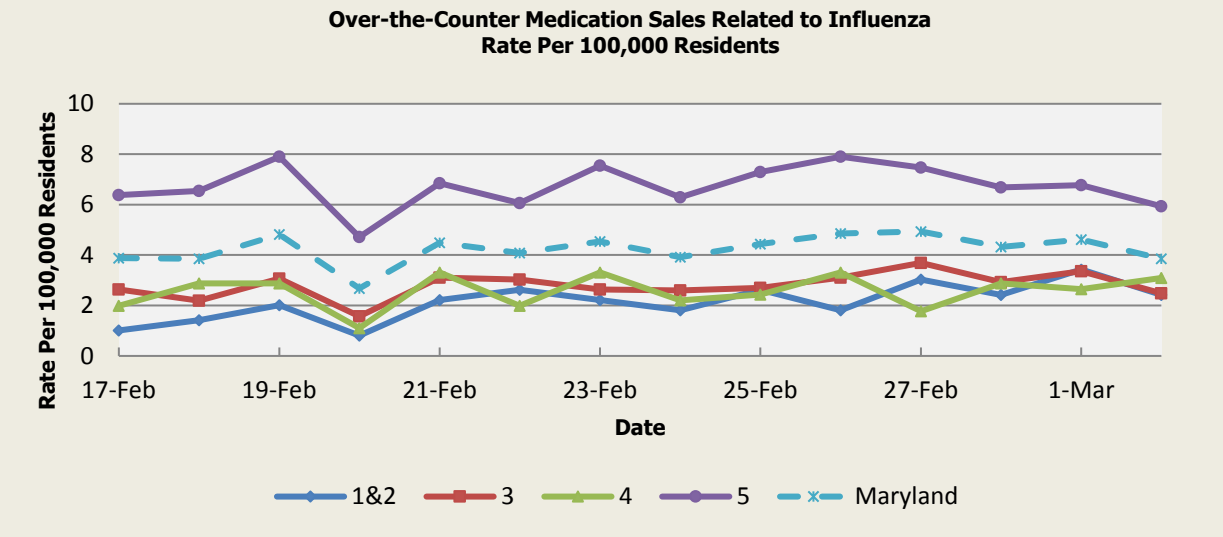
Over-the-Counter Influenza-Related Medication Sales



There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

	OTC Medication Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.61	4.66	2.74	8.09	5.74
Median Rate*	3.02	3.87	2.43	7.47	5.05

** Per 100,000 Residents*

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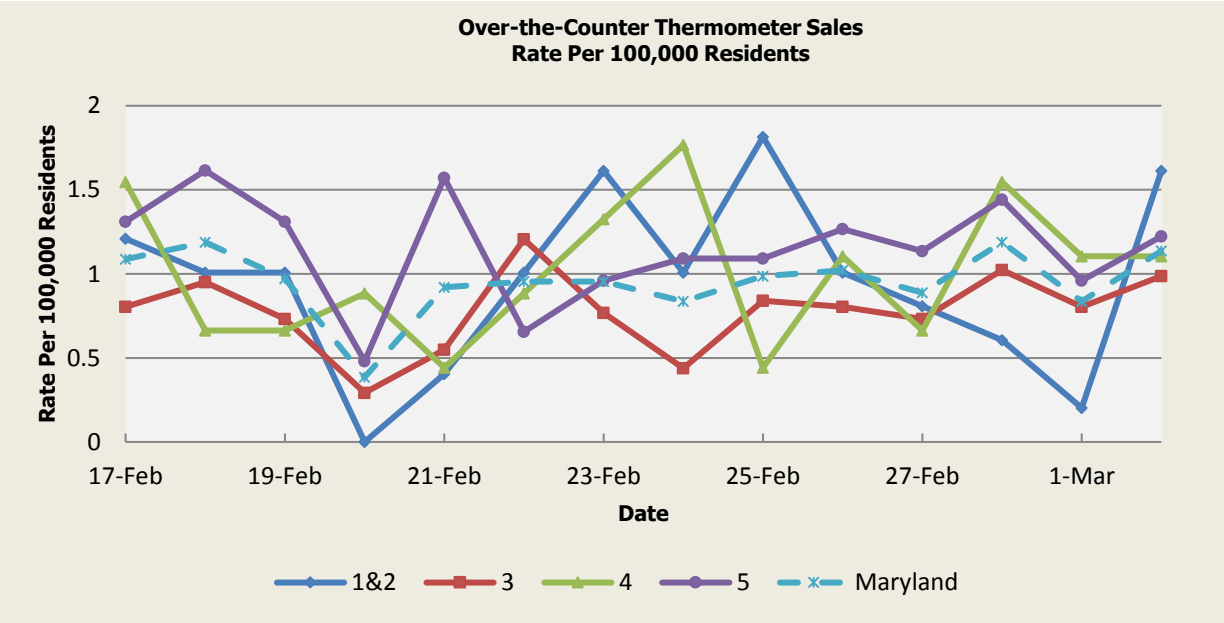
Over-the-Counter Thermometer Sales



There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

	Thermometer Sales Baseline Data January 1, 2010 - Present				
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.09	2.95	2.33	3.92	3.29
Median Rate*	2.82	2.81	2.21	3.75	3.15

** Per 100,000 Residents*

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SYNDROMIC OVERDOSE SURVEILLANCE

The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that most fatal overdoses are Opioid-related.

In preparation for the release of new ESSENCE queries for identifying heroin, opioid and all drug overdoses, please note that we have removed the data chart showing unintentional overdose rates by heroin, opioid, or unspecified substances. These new data, when available, will be presented below.

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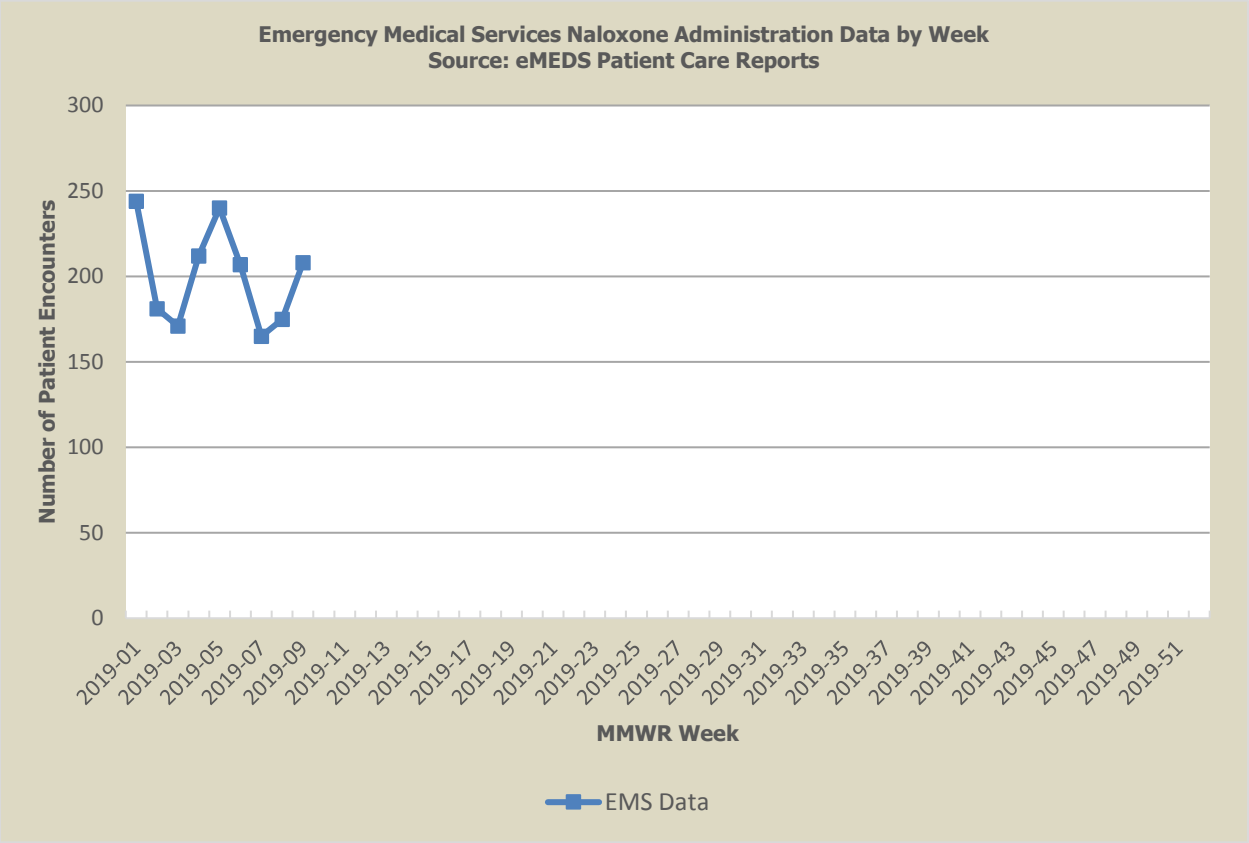
Naloxone Administration Data by Week



Disclaimer on eMEDS naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

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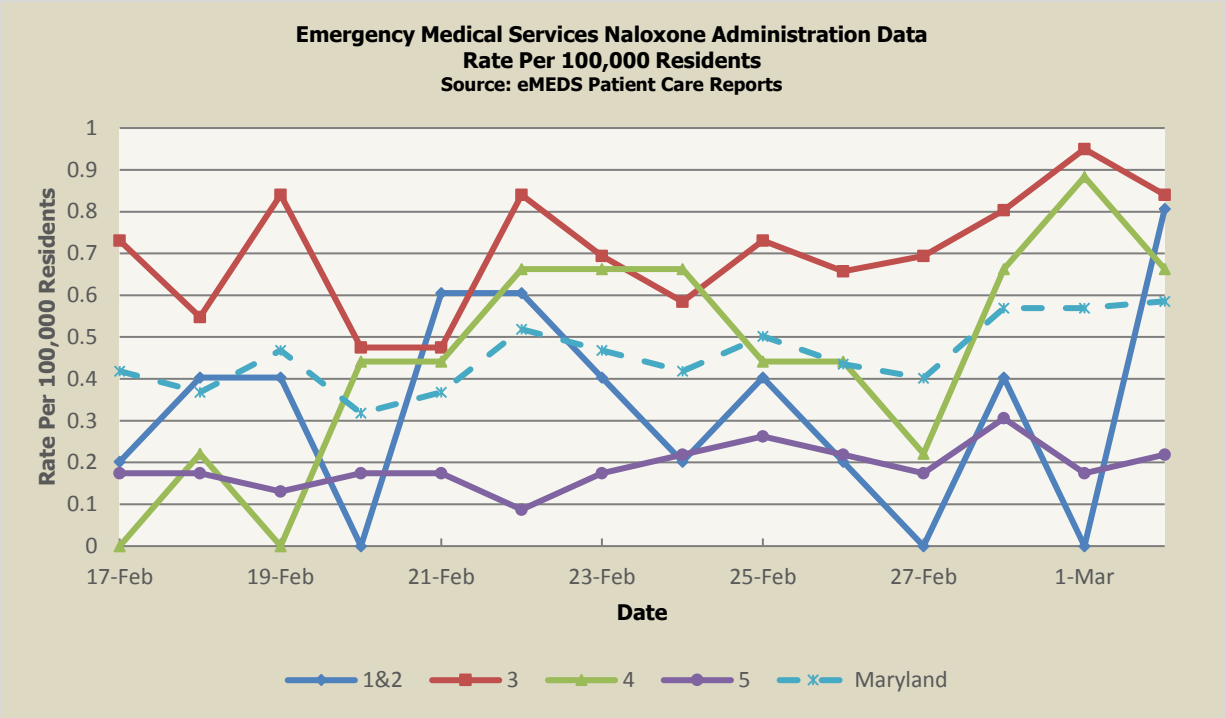
Naloxone Administration Data



Disclaimer on eMEDS Naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

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PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. Presently, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national, and global levels are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of March 7, 2019, the WHO-confirmed global total (2003-2019) of human cases of H5N1 avian influenza virus infection stands at 860, of which 454 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

AVIAN INFLUENZA

There were no relevant avian influenza reports this week.

HUMAN AVIAN INFLUENZA

There were no relevant human avian influenza reports this week.

NATIONAL DISEASE REPORTS

RABIES (MASSACHUSETTS), 06 Mar 2019, Tisbury public health officials have announced the 1st confirmed case of rabies on Martha's Vineyard in 34 years of testing. Late last month [February 2019], the Tisbury Board of Health was advised that a "big brown bat" tested positive for rabies at the Massachusetts State Public Health Laboratory. Rabies is a serious viral disease that can be spread through the saliva of an infected animal by a bite, scratch or if the saliva gets into a person's eyes, nose, or mouth. Read More: http://www.promedmail.org/post/6352330

INTERNATIONAL DISEASE REPORTS

SALMONELLOSIS (NORWAY), 06 Mar 2019, A salmonellosis outbreak in Norway has expanded with 23 people now potentially affected. The Norwegian Institute of Public Health

(Folkehelseinstituttet) said the patients, aged between 2 and 91 years old, became ill in January and February [2019]. Salmonella_ Agbeni has infected 11 people with another 12 suspected cases. The outbreak announcement last week [week of 25 Feb 2019] revealed 9 people were sick. An investigation to find the source is continuing with local authorities, the Veterinary Institute (Veterinaerinstituttet), and Norwegian Food Safety Authority (Mattilsynet). Read More: http://www.promedmail.org/post/6351259

DIPHTHERIA (MALAYSIA), 05 Mar 2019, Three other children tested positive for diphtheria, following the death of a 2-year-old on 21 Feb 2019. The Health Ministry said all 4 children were living in the same house in Johor Baru. The boy is believed to have died due to complications from the disease. "As of [Sat 2 Mar 2019], 3 more diphtheria cases have been confirmed. One of the patients is the sister of the victim, aged 4 [years], who lives in the same house. Another 4-year-old boy and a girl, aged 15, who also live in the same house, also tested positive for the disease," the ministry said in a statement. It said all 3 had been given treatment and one of them was allowed to return home. Read More: http://www.promedmail.org/post/6350669

ANTHRAX (TUNISIA), 04 Mar 2019, The Tunisian counter-terrorism agencies have revealed in their preliminary investigations that the envelopes delivered to politicians, journalists, and syndicate members contained the anthrax toxin. This was the 1st terrorist plot of its kind in the country, they added. They continued, 20 public figures were targeted in this terrorist plot, including 10 prominent politicians, 7 journalists, and activists in syndicates and human rights. Read More: http://www.promedmail.org/post/6348570

MALARIA (COLOMBIA), 04 Mar 2019, Health officials are reporting a malaria outbreak in Cauca department in southwestern Colombia, according to a RCN Radio report (computer translated). The outbreak has affected 322 people in the rural areas of Guapi and Timbiqui. The strain of malaria was identified as _Plasmodium falciparum_. The report notes it was indicated that the presence of malaria was recorded in sites never considered endemic, which would be related to factors such as climate change and issues associated with mining that exacerbated the situation. Read More: http://www.promedmail.org/post/6347890

LASSA FEVER (NIGERIA), 01 Mar 2019, Between January and February [2019], 15 people died of Lassa fever in Ondo state, south west Nigeria, while 102 persons are infected, the Nigerian Medical Association (NMA) said. "As at Thursday [21 Feb 2019], 102 people have tested positive for Lassa fever this year [2019]," chairman of the medical association in Ondo, Dr Wale Oke, told NAN in Akure. Read More: http://www.promedmail.org/post/6329433

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.health.maryland.gov/ or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the MDH website: http://phpa.health.maryland.gov/influenza/fluwatch/Pages/Home.aspx

Please participate in the Maryland Resident Influenza Tracking System (MRITS): http://flusurvey.health.maryland.gov

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE
Regions 1 & 2	Allegany County Frederick County Garrett County Washington County
Region 3	Anne Arundel County Baltimore City Baltimore County Carroll County Harford County Howard County
Region 4	Caroline County Cecil County Dorchester County Kent County Queen Anne's County Somerset County Talbot County Wicomico County Worcester County
Region 5	Calvert County Charles County Montgomery County Prince George's County St. Mary's County